

**REMARKS****Summary of the Office Action**

Claims 25-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Yao et al. (US, 2003/0100059).

The Abstract stands objected because it includes the claim language “means.”

**Summary of Response to the Office Action**

Claims 25, 30 and 38 have been amended to further define the invention. Claims 16-20, 24, 32, 35, and 37 have been canceled without prejudice or disclaimer. Claims 1-15 and 21-23 have been previously withdrawn from consideration as being drawn to a non-elected invention. Accordingly, claims 25-31, 33-34, 36, 38, and 39 are presently pending for consideration. Furthermore, Applicants amend Abstract.

**Objection to the Abstract**

Applicants amend the Abstract to remove the claim language “means” from the abstract. Accordingly, Applicants respectfully request that objection to the Abstract be withdrawn.

**All Claims Define Allowable Subject Matter**

Claims 25-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Yao et al. Applicants respectfully traverse the rejection of claims at least for the following reasons.

With respect to independent claims 25 and 30, as presented, Applicants respectfully assert that Yao et al. does not teach or suggest at least specifying means to specify the noted region in the specimen and selection means to select the intensity of the second light emitted from that noted region. The Office alleges on page 3 of the Action that Example 1 of Yao et al. specifically teaches that “the use of a real-time fluorescence imaging device that is capable of

distinguishing a cell with the 'stated protein' from cells that do not have the 'stated protein' (FIG. 2c, Yao et al.), that is specifying a first light (GFP emitted light) associated with transfected cells and identifying the transfected cells (noted region). The imaging device also determines the intensity of a second light emitted by the transfected cells as evidenced by FIG. 2c of Yao et al. which plots the intensity of second light of transfected cells in addition of second light relative to non-transfected cells." Furthermore, the Office on page 4 of the Action alleges that "the system disclosed by Yao et al. is structurally capable of measuring intercellular reactions in which a plurality of cells stand adherent to one another. The same holds true for distinguishing between a region where the protein is 'in a higher proportion than a stated standard.'" As a result, the Office alleges that Yao et al. anticipates the features recited in at least independent claims 25 and 30. Applicants respectfully disagree.

In accordance with the presently claimed invention, Applicants respectfully submit that change in the second light caused by the presence of a protein occurs not only in the cell having the protein but also in the cells having no protein, that are present in the neighborhood of the cell having the protein (Specification, page 15, line 24 to page 16, line 18, and page 24, lines 10-16). In other words, the noted region determined by "specifying means" is a region having cells where the protein is present in a higher proportion than a stated standard, as well as, the region having the cells emitting the first light due to the presence of the protein and cells having no such protein. Accordingly, the intercellular reaction induced by the protein occurs both in the cells having the protein and the cells having no protein (i.e., neighborhood of the cells having the protein). Since the second light is emitted from the cell having the protein and cells having no protein within the noted region, detecting the intercellular reaction may be improved by measuring the intensity of

the second light.

On the other hand, Applicants respectfully submit that the structure of Yao et al. does not teach the specifying means that specifies a noted region as having the cells that include the protein and the cells that do not include the protein. In addition, Yao et al. does not teach the selecting means that detects the second light emitting from the cells having the protein and cells having no protein. Applicants respectfully submit that structure of Yao et al. merely teaches that the second light emitted from the cells having the protein and Yao et al. appears to be completely silent about detecting the second light emitted from the cells having no protein. Accordingly, Applicants respectfully assert that the structure of Yao et al. does not teach or suggest at least the “noted region” as recited in independent claims 25 and 30, thus Yao et al. fails to anticipate at least the independent claims 25 and 30. Thus, in light of arguments presented above, Applicants respectfully request that rejection of claims 25-39 under 35 U.S.C. § 102(e) be withdrawn because Yao et al. fails to anticipate at least the features of independent claims 25 and 30. Furthermore, Applicants respectfully submit that dependent claims 26-29, 31, 33-34, 36, 38, and 39 are not anticipated by Yao et al. for the reasons as set forth above with respect to independent claims 25 and 30, as well as their dependency from the respective one of independent claims 25 and 30.

**CONCLUSION**

In view of the foregoing remarks, Applicants respectfully request reconsideration of this application, withdrawal of all rejections, and the timely allowance of all pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.R.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

By: Mary Jane Boswell  
Mary Jane Boswell  
Reg. No. 33,652

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**Customer No. 009629**  
**MORGAN, LEWIS & BOCKIUS LLP**  
1111 Pennsylvania Avenue, NW  
Washington, D.C. 20004  
Tel. (202) 739-3000  
Fax (202) 739-3001

MJB/SO/fdb